6059

A NEW SPECIES OF STENAMMA FROM NORTH CAROLINA

(HYMENÓPTERA, FORMICIDAE)

BY MARION R. SMITH, *Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture*

Reprinted from Proceedings of The
ENTOMOLOGICAL SOCIETY OF WASHINGTON, Vol. 53, June, 1951, No 3
Pages 156-158

h

A NEW SPECIES OF STENAMMA FROM NORTH CAROLINA

(HYMENOPTERA, FORMICIDAE)

By MARION R. SMITH, *Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture*

The genus *Stenamma,* which no doubt occurs over all the United States except the extreme southern portion and our hot, arid regions, has workers which are characterized by their slender body and small size (approximately 2-4 mm.), bicarinate clypeus, very small or vestigial eyes, 12-segmented antenna with the last 4 segments forming an indistinct club, scape failing to reach the posterior border of the head, distinct mesoepinotal constriction, pedunculate petiole, and the usually rugulose to ruguloso-reticulate sculpturing of the head and thorax. The ants live in small colonies (a few dozen to two or three hundred individuals) in rotten wood and in the soil beneath objects. One of their preferred habitats is wooded areas. Workers are subterranean in habit and thought to be strictly carnivorous.

According to Creighton, 1950 (Ants of North America), nine forms have been described—*brevicorne* (Mayr), *diecki* Em., *diecki sequoiarum* Whlr., *fovolocephalum* M. R. Sm., *heathi* Whlr., *impar* For., *impressum* Em., *nearcticum* Mayr, and *schmittii* Whlr.

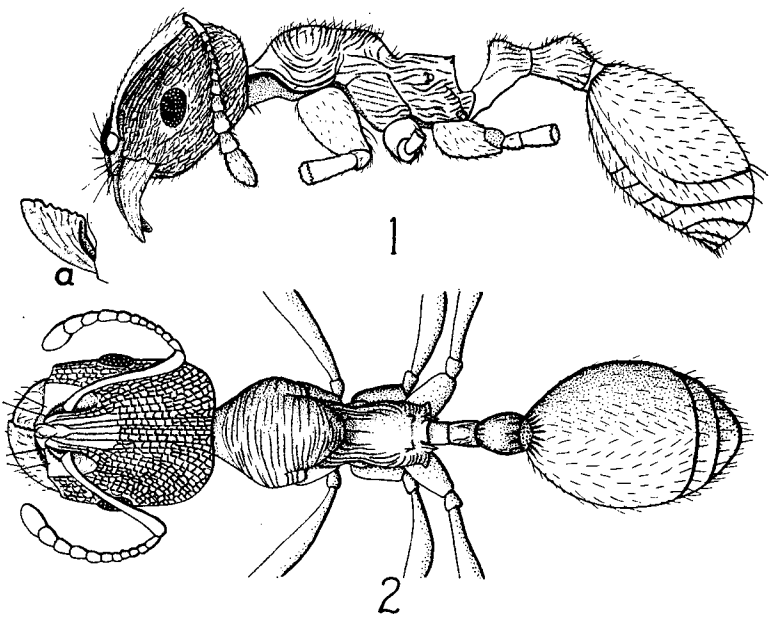
It is unfortunate that no winged castes of *carolinense* and *fovolocephalum* have been collected, as it would be interesting to know whether the castes of these two forms have anterior wings with venation similar to that of *brevicorne* (with the inner branch of the cubital vein arising from the middle of the cubital cell) or to that of *nearcticum* (with the inner branch of the cubital cell arising from the cross vein).

Stenamma carolinense, new species

Worker. Length 4 mm. Head, exclusive of the mandibles and eyes, approximately 1¼ times as long as broad, with almost imperceptibly emarginate posterior border, rounded posterior corners and weakly convex sides. Eye oval, extremely large for a *Stenamma,* with approximately 11-12 ommatidia in its greatest diameter. Scape when fully extended failing by approximately one-fifth its length of reaching the posterior border of the head. All funicular segments approximately as long as, or longer than, broad, the last four segments forming a rather indistinct club. Frontal area subtriangular, impressed, but not distinct from all aspects. Clypeus very weakly bicarinate, almost imperceptibly so; the median anterior border subtruncate. Mandible well developed, subtriangular, with two prominent apical and four or five small, rather indistinct basal teeth. Dorsal surface of pronotum and mesonotum in profile rather uniformly convex up to the point where the posterior part

of the mesonotum forms a more or less straight incline into the distinct mesoepinotal constriction. Mesoepinotal impression strongly developed but very clearly longer than deep. Epinotum in profile with a weakly sloping, somewhat subhorizontal, straight base, which is separated from the declivity by a pair of extremely short, broad and rather blunt tubercles. Petiole from above and behind with a sharply defined anterposterior, angular node, the node widest at the base and tapering apically, and with a straight or very weakly rounded, transverse superior border. Postpetiole from above longer than broad, subcampanulate. Gaster oval, with poorly defined humeri. Longitudinal rugulae at the base of the gaster not as long as the greatest diameter of the postpetiolar node.

Cheeks and front of head with longitudinal rugulae. Much of the posterior dorsal surface of the head and the posterior sides of the head with ruguloso-reticulate, umbilical-like punctures. Pronotum and mesonotum largely smooth and shining but also with fine transverse rugulae. Mesopleuron and side of epinotum with coarse, longitudinal rugulae interspersed with some reticulae. Petiolar node mostly punctulate, also with a few fine rugulae. Postpetiolar node above largely smooth and shining.



Stenamma carolinense, new species. Fig. 1, profile of worker. Fig. 2, dorsal view of worker. Fig. a, left mandible of worker. Most of the legs omitted from the figures and also pilosity on certain parts of the body. (Illustrations by Miss Addie Egbert.)

Body and appendages clothed with abundant, suberect to erect hairs, those on the head and appendages apparently shorter and more reclinate than elsewhere. Clypeus with a number of unusually long hairs.

Body light brown or reddish brown with paler legs. Vertex of head with an infuscated area.

Type locality. On U. S. Highway 1, approximately one mile north of Hoffman in Richmond County, North Carolina.

Described from a holotype and a paratype worker collected by Wm. F. Turner from sparsely vegetated, sandy soil in a peach orchard. The holotype which was collected on February 10, 1937 bears the number T-2640 and the paratype collected on February 11, 1937 bears the number T-2714. Both specimens have been assigned U. S. N. M. Type No. 60922 and placed in the United States National Museum.

The paratype is very similar to the holotype differing from it in its slightly smaller size (3.8 mm.), scape when fully extended failing by one-eighth its length of reaching the posterior border of the head, and the petiolar node when viewed from above and behind, with almost subparallel sides.

This new species can be clearly distinguished from other North American forms by the following characters: Large size (3.8-4 mm.); eye with 11-12 ommatidia in the greatest diameter, clypeus with very poorly developed carinae; epinotum viewed in profile, with rather straight, subhorizontal base, and bearing a pair of extremely short, broad and rather blunt tubercles; pronotum and mesonotum largely smooth and shining but also with fine transverse rugulae; and the postpetiole when viewed from above and behind, longer than broad, subcampanulate.

S. fovolocephalum is very closely related to *carolinense* but differs from that form in its smaller eye (approximately seven ommatidia in its greatest diameter) and by the coarsely sculptured thorax, petiole and postpetiole. The pronotum and mesonotum of *fovolocephalum* is coarsely and transversely rugulose reticulate and the petiole and postpetiole irregularly rugulose-reticulate.